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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/616,214	07/14/2000	Frederick Morgan	C01104/70000	5891
37462	7590	04/21/2005	EXAMINER	
LOWRIE, LANDO & ANASTASI RIVERFRONT OFFICE ONE MAIN STREET, ELEVENTH FLOOR CAMBRIDGE, MA 02142			SHECHTMAN, SEAN P	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/616,214	Applicant(s) MORGAN ET AL.	
	Examiner Sean P. Shechtman	Art Unit 2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 7-20, 22-31, 33, 78-92, 107 and 108 is/are pending in the application.
4a) Of the above claim(s) 109-128 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3, 5, 7-20, 22-31, 33, 78-92, 107 and 108 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 03 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/3/05: 1/7/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-3, 5, 7-20, 22-31, 33, 78-92, 107, and 108 are presented for examination.

Claims 109-128 have been withdrawn from consideration.

Election/Restrictions

2. Applicant's election with traverse of claims 1-3, 5, 7-20, 22-31, 33, 78-92, 107, and 108 in the reply filed on February 3rd 2005 is acknowledged. The traversal is on the ground(s) that the subject matter presently claimed has already been examined by the examiner. This is not found persuasive because the amendment filed November 26th 2004 clearly amended the claims to include new claim limitations that were not examined. The requirement is still deemed proper and is therefore made FINAL.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, specifying a brightness for a selected lighting effect, a LED lighting unit capable of emitting light of any range of colors, a range or colors, specifying a motion of the at least one selected lighting unit, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes

made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. Rejections withdrawn due to the amendment.

Claim Rejections - 35 USC § 102

5. Rejections withdrawn due to the amendment.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-3, 7, 8, 11, 13, 14, 16-20, 22, 23, 25-29, 31, 78-81, 83, 86-92, 107, and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No 6,466,234 to Pyle in view of U.S. Pat. No. 5,889,514 to Boezeman.

Referring to claims 1, 16, 17, 20, 79, 83, 86, and 88-92, Pyle teaches a method and system for preparing a lighting sequence capable of being executed by a controller (Abstract), comprising:

a display interface displaying first information representative of a plurality of lighting effects (bright and dim); a processor permitting a user to select a lighting effect for the lighting

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sequence, based on the displayed first information; and selecting at least one lighting unit to execute the selected lighting effect, based on the displayed first information (Col. 4, lines 10-29).

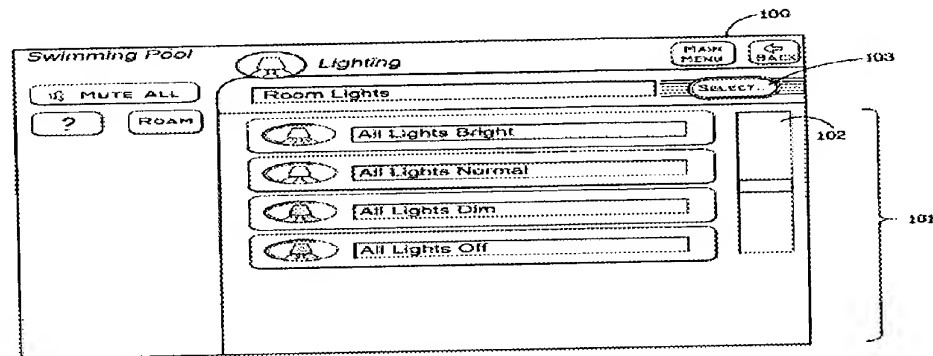


FIG. 1

Examiner respectfully notes page 4, lines 16-19 of the instant specification, wherein applicant teaches the term “light sequence” does not require sequential displays. In fact, the term “light sequence” only requires a controlled display with one light.

Referring to claims 2, 18, 19, Pyle teaches the system above, wherein: the sequence authoring interface is adapted to receive second information representative of an arrangement of a plurality of lighting units, and the display interface is adapted to visually display a first representation of the arrangement of the plurality of lighting units based on the received second information (Col. 4, lines 30-45).

Referring to claims 3, Pyle teaches the system above, wherein the display interface is adapted to display a second representation of the at least one selected lighting effect, based on the first representation of the arrangement of the plurality of lighting units, upon execution of the lighting sequence (Col. 4, lines 30-45).

Referring to claims 8, 23, 80, Pyle teaches the system above, wherein the sequence authoring interface is adapted store user selections on a storage medium (Col. 5, lines 46-60).

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Referring to claims 11, 26, 78, 87, Pyle teaches the system above, wherein the sequence authoring interface is adapted permit the user to specify a transition effect between a first lighting effect and a second lighting effect and a start time and a stop time (Fig. 3-5; Col. 5, lines 14-45).

Referring to claims 13, 28, Pyle teaches the system above, wherein the sequence authoring interface is adapted to specify brightness for the selected lighting effect (Col. 4, lines 10-27).

Referring to claims 14, 31, 107, 108, Pyle teaches the system above, wherein the sequence authoring interface is adapted to permit the user to provide instructions to execute and optionally alter the lighting effect based upon at least one external stimulus (Col. 5, lines 46-60).

Referring to claims 25, Pyle teaches the system above, further comprising selecting a second lighting effect for the lighting sequence, based on the displayed first information (all lights dim).

Referring to claims 29, Pyle teaches the system above, further comprising selecting a plurality of lighting units to execute the lighting effect (all lights).

Referring to claim 81, Pyle teaches the system above, further comprising at least one lighting unit coupled to the controller (Fig. 6). Referring to claims 84-85, Pyle teaches the system above, wherein controller is disposed within the processor, and wherein the controller is separate from the processor (Fig. 6).

Referring to claims 1, 7, 17, 22, 83 and 92, Pyle teaches the present invention relates generally to a system for controlling environmental conditions such as lighting (Abstract, line 1).

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Pyle clearly shows representations of lighting effects on the display of the figure above. Pyle clearly teaches and shows timing control for the lighting effects and lighting units in the scene description table of Fig. 3 and column 5, lines 14-45. In fact, the table is in the form of a grid. Pyle teaches all the limitations set forth above, however, Pyle fails to teach the above table is displayed to the user. That is, Pyle fails to teach displaying grid, wherein the lighting unit is represented at a position along a first axis of the grid, wherein a continuous time interval is represented along second axis of the grid, and wherein a representation of the selected lighting effect during the continuous time interval is displayed on the grid adjacent to the position and parallel to the second axis.

However, referring to claims 1, 7, 17, 22, 83 and 92, Boezeman teaches analogous art, wherein a sequence authoring interface is used for software that processes, creates, edits, displays, and synchronizes time-based data (Col. 1, lines 35-38), wherein execution of this application (what Boezeman refers to as multimedia title, Col. 5, lines 16-18) controls lighting unit (See example, in Col. 5, lines 16-44, i.e., the display; or Col. 6, lines 53-67, the image on the display). The examiner further notes that the audio/video application of Boezeman, while reading on lighting unit, is given as only examples.

Boezeman teaches displaying grid (Figs. 2-15), wherein the lighting unit is represented at a position along a first axis of the grid (Fig. 8, element 150), wherein a continuous time interval is represented along second axis of the grid (Fig. 2, element 84; Col. 6, lines 18-24), and wherein a representation of the selected lighting effect during the continuous time interval is displayed on

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the grid adjacent to the position and parallel to the second axis (Fig. 8, element 153; or Col. 9, lines 7-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to combine sequence editor of Boezeman with the timing control of Pyle.

One of ordinary skill in the art would have been motivated to combine these references because Boezeman teaches creation of applications with a user friendly sequence editor using spacer tools (Col. 1, lines 28-31). Boezeman teaches allowing a developer to coordinate the initiation and stopping of various parts without the need for writing code or repetitive time consuming steps (Col. 2, lines 41-46). Boezeman teaches allowing the user to synchronize an application in an easy to use visual interface with a great deal of flexibility by viewing the application from the perspective of its time structure (Col. 10, lines 1-11).

7. Claims 5, 15, 30, 33, 82, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No 6,466,234 to Pyle in view of U.S. Pat. No. 5,889,514 to Boezeman as applied to claims 1, 17, and 81 above, and further in view of U.S. Pat. No. 6,361,198 to Reed.

Referring to claims 5, 15, 30, 33, 82, Pyle teaches the present invention relates generally to a system for controlling environmental conditions such as lighting (Abstract, line 1).

Referring to claims 5, 30, 82, Pyle fails to teach the system above, wherein the lighting unit includes a LED capable of emitting light of any of a range of different colors, and wherein the sequence authoring interface is adapted to permit the user to select a color of light emitted by the LED.

Referring to claims 15 and 33, Pyle fails to teach the system above, wherein the interface is adapted to permit the user to specify motion of the lighting unit.

However, Reed teaches a method and system for preparing a lighting sequence capable of being executed by a controller (Title; Abstract of '198), wherein

Referring to claims 5, 30, 82, Reed teaches the system above, wherein a lighting unit includes at least an LED capable of emitting light of any of a range of different colors, and wherein a sequence authoring interface is adapted to permit a user to select a color of light emitted by the LED (Col. 3, lines 25-57 of '198).

Referring to claims 15 and 33, Reed teaches the system above, wherein the interface is adapted to permit the user to specify motion of the lighting unit (Col. 5, lines 1-7; Fig. 16 of '198).

Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to combine the teachings of Reed with the teachings of Pyle.

One of ordinary skill in the art would have been motivated to combine these references because Reed teaches an interactive light display that uses a computer to allow display routines to be conveniently custom designed and easily exchanged and even downloaded from the internet (Col. 2, lines 1-16 of '198)

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No 6,466,234 to Pyle in view of U.S. Pat. No. 5,889,514 to Boezeman as applied to claim 17 above, and further in view of U.S. Pat. No 5,945,993 to Fleischmann.

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Referring to claim 20, Pyle teaches all of the limitations set forth above, however Pyle fails to clearly provide for selecting a second lighting unit.

Referring to claims 20, Fleischmann clearly teaches controlling lighting loads of many zones (Fig. 2). Fleischmann clearly provides for selecting at least two lighting effects for a single zone (Col. 9, lines 36-47). Referring to claims 20, Fleischmann fails to clearly provide for selecting a second lighting unit.

However, it would have been obvious select a second lighting zone from the map of lighting zones shown in figure 2 of Fleischmann above because duplicating a part for multiple effect is within the level of ordinary skill in the art *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380, (CCPA1960).

One of ordinary skill in the art would have been motivated to select a second lighting zone to turn on office lights before the start of business as taught by Fleischmann (Col. 1, lines 11-20), or conserve energy if someone leaves the lighting loads on as taught by Fleischmann (Col. 9, lines 7-21), or if a person forgot if the lights were left on in the office, that person could select their office and turn the lights off from home, thereby conserving energy (Col. 9, lines 22-30).

9. Claims 9, 24, 84, 85, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No 6,466,234 to Pyle in view of U.S. Pat. No. 5,889,514 to Boezeman as applied to claims 1, 17, and 83 above, and further in view of U.S. Pat. No 5,945,993 to Fleischmann.

Referring to claims 9, 24, Pyle teaches all of the limitations set forth above, however Pyle fails to teach sequence authoring interface is adapted to permit the user to select a color for the lighting effect.

Referring to claims 84-85, Pyle teaches all of the limitations set forth above, however Pyle fails to teach that the controller is disposed within the processor, and wherein the controller is separate from the processor.

However, referring to claims 9, 24, Fleischmann teaches analogous art, wherein the sequence authoring interface is adapted to permit the user to select a color for the lighting effect (Col. 9, lines 36-47).

Referring to claims 84-85, Fleischmann teaches the system above, wherein controller is disposed within the processor (Col. 10, lines 46-65), and wherein the controller is separate from the processor (Col. 3, lines 7-26; Col. 9, lines 22-30; Col. 8, lines 9-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to combine the teachings of Fleischmann with the teachings of Pyle.

One of ordinary skill in the art would have been motivated to combine these references because Fleischmann teaches a computer that can control a plurality of lighting loads quickly and conveniently (Col. 1, line 61 – Col. 2, line 13).

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,466,234 to Pyle in view of U.S. Pat. No. 5,889,514 to Boezeman as applied to claim 1 above, and further in view of U.S. Pat. 5,334,992 to Rochat.

Referring to claim 10, Pyle teaches the present invention relates generally to a system for controlling environmental conditions such as lighting (Abstract, line 1).

Referring to claim 10, Pyle fails to teach the system above, further comprising permitting the user to select a starting color and an ending color for the lighting effect.

However, referring to claim 10, Rochat teaches analogous art, including a starting color and an ending color for a lighting effect (Fig. 5; Col. 6, lines 45-60 of '992).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Pyle with the teachings of Rochat.

One of ordinary skill in the art would have been motivated to combine these references because Rochat teaches an improved system for controlling color of display devices and color selection. Furthermore, Rochat teaches an interface that enhances the ease of color selection and manipulation in a computer system by utilizing display graphics to assist in the visualization of the available color selections. Further advantages of Rochat generally apply to increased accuracy, predictability and ease of use of the interface (Col. 4, lines 13-68 of '992).

11. Claims 12 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,466,234 to Pyle in view of U.S. Pat. No. 5,889,514 to Boezeman as applied to claims 1, 17 above, and further in view of U.S. Pat. 5,739,823 to Akaza.

Referring to claims 12 and 27, Pyle teaches the present invention relates generally to a system for controlling environmental conditions such as lighting (Abstract, line 1).

Referring to claims 12 and 27, Pyle fails to teach the system above, further comprising permitting the user to specify a priority for a first lighting effect which shares a temporal overlap with a second lighting effect.

However, referring to claims 12 and 27, Akaza teaches analogous art, comprising permitting the user to specify a priority for a first lighting effect which shares a temporal overlap with a second lighting effect (Col. 9, lines 50-67 of '823).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Pyle with the teachings of Akaza.

One of ordinary skill in the art would have been motivated to combine these references because Akaza teaches a graphic display device for displaying graphs based on input data that can be clearly and easily discriminated (Col. 1, lines 5-7 and lines 55-56 of '823).

Response to Arguments

Applicant's arguments filed November 26th 2004 have been fully considered but they are not persuasive.

12. Applicant argues that the new Figs. 7 and 8 overcome the objections to the drawing under 37 C.F.R. 183(a). The examiner agrees that the new drawings clearly show the claimed elements for the method. However, the examiner respectfully submits that the claims noted in the objection were examples of the noted deficiencies and the office action clearly set forth that applicant "should refer to these as examples of deficiencies and should make all the necessary corrections to eliminate the drawing objections" (See previous office action). Therefore, the examiner believes the office action clearly indicated that the noted deficiencies were examples,

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and all claimed limitations for both method and apparatus claims must be shown or the feature(s) canceled from the claim(s). It is for this reason that the above objections to the drawings remain.

13. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., energizing a given light source for any appreciable length of time (page 23, paragraph 2 of arguments)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

14. All other arguments with respect to claims 1-3, 5, 7-20, 22-31, 33, 78-92, 107, and 108 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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16. The prior art or art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents or publications are cited to further show the state of the art with respect to lighting effects displayed with control along a displayed temporal axis.

U.S. Pat/Pub. No. 5,592,602 to Edmunds.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SPS

Sean P. Shechtman

April 15, 2005

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100